

BOOK REVIEW

Flora of New Brunswick, Second Edition: A Manual for Identification of the Vascular Plants of New Brunswick by Harold R. Hinds. 2000. 695 pp. illus. line drawings. ISBN 1-55131-015-5 CAN\$50.00 (softcover) plus CAN\$8 s&h. Published by the Biology Department, University of New Brunswick, Fredericton (orders: www.unb.ca/departs/science/biology/Flora.html).

The 2nd edition of the *Flora of New Brunswick* was worth the wait. It was published just in time for the author, a gifted field botanist and teacher, to realize his goal of seeing it in print before his untimely death in his early 60s on May 9, 2001. This 6" × 9" paperback is 1.75 inches thick and will fit handily in the day-pack. Users include botanists, ecologists, foresters, and students in New Brunswick and adjacent Maine and other Maritime Provinces. This is a must-have for all academic libraries throughout northeastern North America and for herbaria worldwide.

The *Flora* represents the main focus of the latter part of Hal Hinds' career. His 23 years of teaching botany at the University of New Brunswick (UNB) and in government-sponsored programs gave numerous students a much deeper appreciation for plants, and some took up botany as a profession because of his influence. One of his specialties was the Polygonaceae, and he spent eight weeks at the Missouri Botanical Garden in 1993 to provide important updates for the *Flora of North America*. As Curator of the Connell Memorial Herbarium at UNB from 1979 to 2001, he expanded and improved the collection significantly and enjoyed providing loans and resources to visiting scientists.

His success at finding historic and previously unknown locales for rare plants enabled him to make a major contribution in the protection of many populations. Hal was known for his adventurous and courageous spirit, and he was willing to tackle baffling hybrids that others were willing to list as "sp.," including the wily shadbushes, asters, sedges, grasses, and ferns. He was always ready to help others learn difficult groups, and had many tips for field identification that made expeditions especially fun and informative. For example, to test for scabrous texture on upper culms of some *Carex*, draw the culm across your lower lip. He brought a clear-eyed approach to some long-standing taxo-

onomic challenges by closely observing morphology and ecology of the taxa over their full range of habitats. The 2nd edition reflects this deeper understanding of some difficult species groups.

The 2nd edition of *Flora of New Brunswick* improves over the 1st edition, published in 1986, in that it includes not only the most recent and best data regarding systematic treatments, but has the contributions of many other knowledgeable botanists building upon Hal's original concepts. Hal became ill while still a young man in his 50s and continued his work on the 2nd edition despite bouts with poor health. Friends and associates formed a Revision Committee in 1997, and with support from the UNB Department of Biology, helped him complete the work. Users of this edition can be grateful for their dedication and volunteer efforts. Some contributed in part by writing sections of the *Flora*. An updated chapter on the "History of Plant Collecting" by C. Mary Young is a fascinating account that puts the 2nd edition in the context of a long struggle to understand the New Brunswick flora. Stephen R. Clayden, lichenologist, wrote a 30-page chapter, "History, Physical Setting, and Regional Variation of the Flora," which is a comprehensive and detailed overview with more than 130 references cited for this chapter alone; this is richly expanded from the 1st edition and will doubtless be cited in many future papers. James W. Goltz, with expertise in the flora of Ontario and in Orchidaceae of New Brunswick, updated the treatment of that group, and worked on numerous other keys and species notes as well.

There are many fine features of the *Flora of New Brunswick*. The font for the cover is Arrus BT, and the text font is Helvetica. Varying sizes and some headings in bold make for high readability. The taxonomic treatments follow the first four volumes of the *Flora of North America* and some unpublished revisions from upcoming volumes. A glossary is brightened by some line drawings and the definitions are concise but clear. The family key provides an entrée, though it is probably easiest to use if one already has a rough idea of what the plant in question might be (and aren't all such keys this way?). The keys are prepared so that each couplet references the previous couplet that brought one to a certain place, so the user can easily retrace the steps taken if necessary. A dot map and a line drawing accompany every species, on the same page as the species notes. Dot maps are based on specimens in the Connell Memorial Herbarium. The

presentation of maps and drawings is an improvement over that of the 1st edition, in which drawings and maps were each in separate appendices. The drawings are mostly from *An Illustrated Flora of the Northern United States and the British Possessions* by N. L. Britton and A. Brown (1913). Additional illustrations were prepared especially by C. Mary Young (the cover, 40 glossary illustrations, 25 larger illustrations), Carol Bayley (some of the glossary illustrations), Mary Sims (ca. 13 smaller illustrations), Chris Sears, and W. A. Hathaway. A few of these illustrations appeared in *Wildflowers of Cape Cod* by Hinds and Hathaway (1968). These illustrations, which in my opinion could have been more prominently credited in the book, are what make this *Flora* especially user-friendly as they enable the user to establish whether or not he/she is in the ballpark. They are necessarily small, and lack scale, but they include cogent aspects that help provide a search image.

Species notes include translation of the specific epithet; common names including English, French, Maliseet, and Mi'kmaq; geographic range; chromosome number; frequency; habitat and locale information specific to New Brunswick and also throughout Canada in some cases; synonymy; rarity rankings assigned by the Atlantic Conservation Data Centre and signified by stars; pollination and dispersal information if unusual; edibility; toxicity; status as invasive exotic; and folklore attributes. Wildlife uses are noted where pertinent. If they are relevant, subspecific taxa are included. Recent taxonomic changes are often noted with author and reference so that one can look up recent systematic studies. At the back, there are a 5-page bibliography and appendices that summarize the flora and specify changes. Finally, the 2nd edition is completely indexed, including all common names. A full description for each species is not offered; otherwise the volume would be too unwieldy to take into the field. If necessary, the user can turn for descriptions to other sources such as *Gray's Manual, 8th Edition* (Fernald 1950)—which Hal referred to as the “dinosaur.” For errata and addenda, a web site is available (see publication information, above).

Although Hal is much missed by those who worked with him on various plant conservation and taxonomy projects, the *Flora of New Brunswick* is an excellent way to remember his warmth and humor and to benefit from his vast field experience and detailed study. Many in the *Rhodora* readership live beyond the full

usefulness of the species included in this *Flora*, but anyone who enjoys looking at plants will appreciate the approach taken here. The 2nd edition sets a standard for state and regional floras and should be studied as a model for other works of its kind. Doubtless the 2nd edition will lead to the planning of some botanical vacations in beautiful New Brunswick, where so many interesting habitats and plants await those who want to appreciate the flora through Hal's eyes.

LITERATURE CITED

- BRITTON, N. L. AND A. BROWN. 1913 [reprinted 1970]. An Illustrated Flora of the Northern United States, Canada and the British Possessions, Vols. 1-3. Dover Publications, Inc., New York.
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- HINDS, H. R. AND W. A. HATHAWAY. 1968. Wildflowers of Cape Cod. Chatham Press, Chatham, MA.

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